

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

CECH et al.

Application No.: 08/974,584

Filed: November 19, 1997

For: FUNCTIONAL HOMOLOGS OF

HUMAN TELOMERASE REVERSE TRANSCRIPTASE CONTAINING THE T MOTIF

Customer No.: 34151

Confirmation No. 8401

Examiner:

Myers, Carla J.

Art Unit:

1634

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER

37 CFR §1.97 and §1.98

Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In previously filed information disclosure statements, Applicants have identified certain related patents and pending non-provisional patent applications owned or co-owned by Geron Corporation with claims related to telomerase reverse transcriptase (e.g., claiming telomerase reverse transcriptase protein sequences, and/or telomerase reverse transcriptase nucleic acid protein encoding sequences, and/or telomerase reverse transcriptase promoter sequences, and/or cells or compositions comprising such protein or nucleic acid sequences, and/or the use of such proteins, nucleic acids, cell or compositions). For the convenience of the Office, in this supplemental IDS Applicants have provided an updated list (below) of related patents and applications including additional patents and applications. The tables below also show the status of pending applications and indicates where there have been one or more adverse decisions by the Office related to pending claims. Copies of the issued or most recently pending claims are

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included for the convenience of the examiner and are listed in the accompanying PTO/SB08B by reference number as shown in the table.

It is understood that the Office has access to the full patent specifications, file histories, and other information via PAIR. However, should the Office require copies of any specifications or file histories the Office is urged to contact the undersigned.

## Summary

Patent No.	Title	Claims
Pat. No. 6,093,809	Telomerase	AU
Pat. No. 6,166,178	Telomerase Catalytic Subunit	AV
Pat. No. 6,261,836	Telomerase	AW
Pat. No. 6,309,867	Telomerase	AX
Pat. No. 6,444,650	Antisense Compositions For Detecting And Inhibiting Telomerase Reverse Transcriptase	AY
Pat. No. 6,475,789	Telomerized Mammalian Cells Human Telomerase Catalytic Subunit: Diagnostic and Therapeutic Methods	AZ
Pat. No. 6,617,110	Cells Immortalized with Telomerase Reverse Transcriptase for Use in Drug Screening	BA
Pat. No. 6,627,619	Antisense Compositions for Detecting and Inhibiting Telomerase Reverse Transcriptase	BB
Pat. No. 6,808,880	Method for Detecting Polynucleotided Encoding Telomerase	вс
Pat. No. 6,921,664	Telomerase	BD
Pat. No. 6,927,285	Genes for Human Telomerase Reverse Transcriptase and Telomerase Variants	BE
Pat. No. 7,005,262	Methods for Detecting Nucleic Acids Encoding Human Telomerase Reverse Transcriptase	BF
Pat. No. 7,056,513	Telomerase	BG
Pat. No. 7,195,911	Mammalian Cells that have Increased Proliferative Capacity	ВН
Pat. No. 7,091,021	Inactive Variants of the Human Telomerase Catalytic Subunit	ВІ
Pat. No. 6,337,200	Human Telomerase Catalytic Subunit Variants	BJ
Pat. No. 6,610,839	Promoter For Telomerase Reverse Transcriptase	ВК
Pat. No. 6,767,719	Mouse Telomerase Reverse Transcriptase	BL
Pat. No. 6,777,203	Telomerase Promoter Driving Expression of Therapeutic Gene Sequences	ВМ
Pat. No. 6,440,735	Dendritic Cell Vaccine Containing Telomerase Reverse Transcriptase for the Treatment of Cancer	BN

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App. No.			Pending
	Title	Status .	Claims
09/432,503	Reducing Tissue Damage Due to Impaired Replication Using a Vector for Expressing Telomerase Reverse Transcriptase	In most recent O.A., previous claims were rejected under 35 USC § 112 ¶ 1 (enablement ).	ВО
09/721,477	Immunogenic Nucleic Acid Sequences of Human Telomerase Reverse Transcriptase	In most recent O.A., previous claims were rejected under 35 USC § 112 ¶ 1 (new matter, written description and enablement requirements); §§ 102 and 103 (citing GeneBank Accession No. AA281296).	BP
09/721,506	Nucleic Acids Encoding Human Telomerase Reverse Transcriptase and Related Homologs	Allowed ,	BQ
10/877,124	Vector Encoding Inactivated Telomerase for Treating Cancer	Eo examination on the merits	BR
10/877,146	Vaccine Containing the Catalytic Subunit of Telomerase for Treating Cancer	No examination on the merits - Now Abandoned	BS
10/877,022	Treating Cancer Using a Telomerase Vaccine (Immunodetection of hTRT proteins)	In most recent O.A., claims are rejected under 35 USC § 112 ¶ 1 (written description and enablement requirements); and 35 USC § 112 ¶ 2	ВТ
11/207,078	Sequence of Telomerase Reverse Transcriptase, and Products Derived Therefrom for Conducting Clinical Assays, Immortalizing Cells, Screening Drugs, Treating Cancer, and for Other Commercial Purposes	No examination on the merits	BU
10/044,692	Nucleic Acid Vaccine for Eliciting an Immune Response Against Telomerase Reverse Transcriptase	In most recent O.A., previous claims were rejected under 35 USC § 112 ¶ 1 (written description and enablement requirements); and for obviousness-type double patenting over Pat. Nos. 6,093,809 and 6,261,836.	BV
08/974,584 (This application)	Functional Homologs of Human Telomerase Reverse Transcriptase Containing the Telomerase T Motif	Obviousness-type double patenting rejections citing Pat. Nos. 6,261,836; 6,927,285; 6,921,664; 6,337,200; 6,475,789; 7,195,911 and Application Nos. 09/721,477; 10/877,124; 09,721,506; 11/207,078 and 10/044,692.	BW
10/053,758	Antibody to Telomerase Reverse Transcriptase	Allowed	ВХ
10/637,443	Identifying and Testing Antisense Oligonucleotides that Inhibit Telomerase Reverse Transcriptase	Rejection under 35 USC § 112 ¶ 1 written description and enablement requirements; and 112 ¶ 2	BY

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App. No.	Title	Status	Pending Claims
10/862,698	Protein and Peptide Fragments from Mouse Telomerase Reverse Transcriptase	Abandoned in favor of continuation. Prior claims were rejected under 35 USC § 112 ¶ 1 written description and enablement requirements; § 102; and § 103	BZ
09/615,039	Oncolytic Virus that Replicates in Cells Expressing Telomerase Reverse Transcriptase	Abandoned Rejection under 35 USC § 112 ¶ 1 written description and enablement requirements; § 112 ¶ 2; § 102, § 103; and obviousness-type double patenting	CA
11/411,604	Telomerase Promoter Sequences for Screening Telomerase Modulators (Con of 09/615,039)	No substantive examination on the merits	СВ
10/208,243	Method for Identifying and Killing Cancer Cells (Con of Pat. No. 6,440,735)	Non-final rejection under 35 USC § 112 ¶ 1 written description and 35 USC § 112 ¶ 1	CC
11/413,838	Cellular Telomerase Vaccine and Its Use for Treating Cancer (Div of 10/208,243)	No examination on the merits	CD
10/674,836	Cancer Therapy Using the Telomerase Promoter	Rejection under 35 USC § 112 ¶ 1 written description and enablement; double patenting over 6,777,203 35 USC § 112 ¶ 1	CE

## References cited on the attached PTO/SB/08A and PTO/SB/08B forms

The references cited on the attached PTO/SB/08A and PTO/SB/08B forms are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

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This IDS is being filed before the mailing date of a first Office Action after the filing of a request for continued examination and it is believed no fee is due. However, if a fee is believed due please deduct any additional fees from Deposit Account No. 19-4880.

Respectfully submitted,

Randolph Ted Apple Reg. No. 36,429

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RTA:crf

JUL 2 7 2007 2007 Sopretitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 5

Complete if Known					
Application Number	08/974,584				
Filing Date	November 19, 1997				
First Named Inventor	Cech				
Art Unit	1634				
Examiner Name	Myers, C. J.				
Attorney Docket Number	015389-002950US				

			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	ļ	Number Kind Code <sup>2 (# known)</sup>			riguies Appeal
	AA	US-7,195,911 B2	03-27-2007	Cech et al.	
	AB	US-7,091,021 B2	08-15-2006	Morin	
	AC	US-7,056,513 B2	06-06-2006	Cech et al.	
•	AD	US-7,005,262 B2	02-28-2006	Cech et al.	
	AE	US-6,927,285 B2	08-09-2005	Cech et al.	
	AF	US-6,921,664 B2	07-26-2005	Cech et al.	
	AG	US-6,808,880 B2	10-26-2004	Cech et al.	
	AH	US-6,777,203 B1	08-17-2004	Morin et al.	
	ΑĪ	US-6,767,719 B1	07-27-2004	Morin et al.	
	AJ	US-6,627,619 B1	09-30-2003	Cech et al.	
•	AK	US-6,617,110 B1	09-09-2003	Cech et al.	
	AL	US-6,610,839 B1	08-26-2003	Morin et al.	
	AM	US-6,475,789 B1	11-05-2002	Cech et al.	
	AN	US-6,444,650 B1	09-03-2002	Cech et al.	
	AO	US-6,440,735 B1	08-27-2002	Gaeta	
	AP	US-6,337,200 B1	01-08-2002	Morin	
	AQ	US-6,309,867	10-30-2001	Cech et al.	
	AR	US-6,261,836	07-17-2001	Cech et al.	
	AS	US-6,166,178	12-26-2000	Cech et al.	
	AT	US-6,093,809	07-25-2000	Cech et al.	

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*			t Document		Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			Criticistant igaics / ppss	Ľ.		

Examiner Signature	Date Considered	
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute	for form 1449B/PTO				Complete if Known
				Application Number	08/974,584
INFO	RMATION DIS	CLOS	URE	Filing Date	November 19, 1997
STAT	<b>TEMENT BY A</b>	PPLIC	ANT	First Named Inventor	Cech
				Art Unit	1634
	(Use as many sheets as r	necessary)		Examiner Name	Myers, C. J.
Sheet	2	of	5	Attorney Docket Number	015389-002950US

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>				
	AU	Claims for U.S. Patent No. 6,093,809.					
	AV	Claims for U.S. Patent No. 6,166,178.					
	AW	Claims for U.S. Patent No. 6,261,836.					
	AX	Claims for U.S. Patent No. 6,309,867.					
	AY	Claims for U.S. Patent No. 6,444,650.					
	AZ	Claims for U.S. Patent No. 6,475,789.					
	BA	Claims for U.S. Patent No. 6,617,110.					
	ВВ	Claims for U.S. Patent No. 6,627,619.					
	ВС	Claims for U.S. Patent No. 6,808,880.					
	BD	Claims for U.S. Patent No. 6,921,664.					
	BE	Claims for U.S. Patent No. 6,927,285.					
Examiner Signature		Date Considered					

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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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	BF	Claims for U.S. Patent No. 7,005,262.						
	ВG	Claims for U.S. Patent No. 7,056,513.						
	вн	Claims for U.S. Patent No. 7,195,911.						
	ВІ	Claims for U.S. Patent No. 7,091,021.						
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	во	Pending claims for US patent application 09/432,503.						
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Sheet	4	of	5	Attorney Docket Number	015389-002950US

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	BQ	Pending claims for US patent application 09/721506.					
	BR	Pending claims for US patent application 10/877,124.					
	BS	Pending claims for US patent application 10/877,146.					
	вт	Pending claims for US patent application 10/877,022.					
	ВU	Pending claims for US patent application 11/207,078.					
	BV	Pending claims for US patent application 10/044,692.					
	вw	Pending claims for US patent application 08/974,584.					
	вх	Pending claims for US patent application 10/053,758.					
	BY	BY Pending claims for US patent application 10/637,443.					
	BZ	Claims previously pending in US patent application 10/862,698 (abandoned)					
	CA	CA Claims previously pending in US patent application 09/615,039 (abandoned).					
Examiner Signature		Date Considered					

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Sheet	5	of	5	Attorney Docket Number	015389-002950US	

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Examiner Initials *	URE   magazine incomet period summerium estates etc.) data paga(a) valume income pumbar(a) publicher cit					
	СВ	Pending claims for US patent application 11/411,604.				
	CC	Pending claims for US patent application 10/208,243.				
	CD	Pending claims for US patent application 11/413,838.				
	CE	Pending claims for US patent application 10/674,836.				

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